

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
26 May 2005 (26.05.2005)

PCT

(10) International Publication Number
WO 2005/046949 A1

(51) International Patent Classification⁷: **B26F 1/40**

(21) International Application Number:
PCT/NL2004/000801

(22) International Filing Date:
15 November 2004 (15.11.2004)

(25) Filing Language: **Dutch**

(26) Publication Language: **English**

(30) Priority Data:
1024777 13 November 2003 (13.11.2003) **NL**

(71) Applicant (for all designated States except US): **HUHTAMAKI MOLDED FIBER TECHNOLOGY B.V.** [NL/NL]; Zuidelijke Industrieweg 3-7, NL-8801 JB Franeker (NL).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **DIJKSTRA, Wijbe** [NL/NL]; Ljerk 3, NL-9035 DD Dronrijp (NL). **KIENSTRA, Wouter, Josephus** [NL/NL]; Swamwerterdyk

3, NL-8637 VS Wieuwerd (NL). **POST, Johannes, Jelle** [NL/NL]; De Eker 16, NL-8604 VB Sneek (NL). **KUIPER, Harald, John** [NL/NL]; Heidemeer 15, NL-8445 SC Heerenveen (NL).

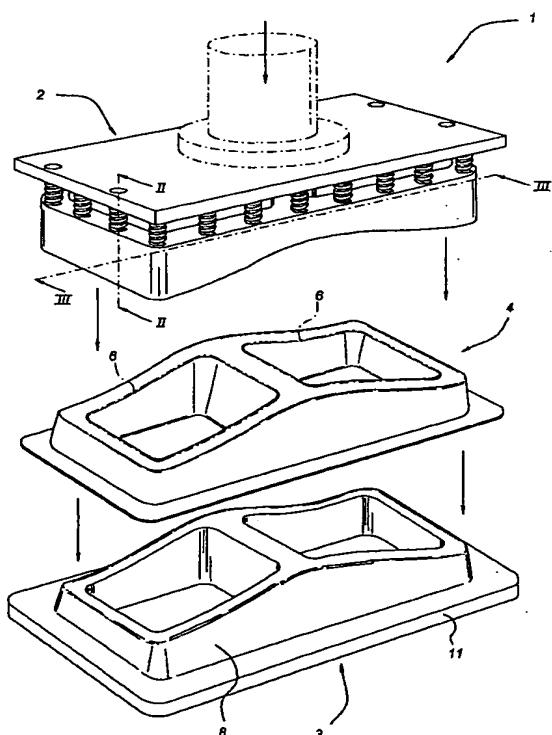
(74) Agents: **VAN WESTENBRUGGE, Andries et al.**; Nederlandsch Octrooibureau, Scheveningseweg 82, P.O. Box 29720, NL-2502 LS The Hague (NL).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH,

[Continued on next page]

(54) Title: METHOD AND DEVICE FOR PUNCHING A PART OF MOULDED FIBRE MATERIAL



(57) Abstract: Method and device for punching products made of moulded fibre material. For this purpose there is a bearer (3) on which a blank pre-moulded fibre material is placed from which the product or the products have to be punched. This bearer (3) is made with a contour. The cutting die (12) is provided with a corresponding contour, as a result of which during punching a cut line is produced that is not in one plane but is three-dimensional. Before the actual punching operation takes place, the peripheral edge of the larger blank is clamped close to the cutting location.



GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— *with international search report*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.